SS: 3044

MAIN FILE

JPRS: 4485

24 March 1961

19990114

PUBLIC HEALTH IN CHINA

By Dr. Michel Sakka

- COMMUNIST CHINA -

114 152





DTIC QUALITY INSPECTED 2

This material, translated under U.S. Government auspices, is distributed for scholarly uses to repository libraries under a grant/subscription arrangement with the Joint Committee on Contemporary China of the American Council of Learned Societies and the Social Science Research Council. The contents of this material in no way represent the policies, views, or attitudes of the U.S. Government or the other parties to the arrangement. Queries regarding participation in this arrangement should be addressed to the Social Science Research Council, 230 Park Avenue, New York 17, New York.

### FOREWORD

This publication was prepared under contract by the UNITED STATES JAINT PUBLICATIONS RE-SEARCH SERVICE, a federal government organization established to service the translation and research needs of the various government departments.



#### SUBSCRIBING REPOSITORIES

University of Arizona Tucson, Arizona

University of British Columbia Vancouver 8, Canada

State Paper Room British Museum London, W.C. 1, England

Center for Chinese Studies University of California Berkeley 4, California

University of California Berkeley 4, California

Government Publications Room University of California Los Angeles 24, California

University of Chicago Library Chicago 37, Illinois

Librarian, East Asiatic Library Columbia University New York 27, New York

Wason Collection Cornell University Library Ithaca, New York

Council on Foreign Relations 58 East 60th Street New York 21, New York

Duke University Library Durham, North Carolina

The Fletcher School of Law and Diplomacy Tufts University Medford, Massachusetts

Harvard College Library Cambridge 38, Massachusetts

Center for East Asian Studies Harvard University 16 Dunster Street Cambridge 38, Massachusetts

Harvard-Yenching Institute Cambridge 38, Massachusetts

University of Hawaii Honolulu 14, Hawaii

The Hoover Institution Stanford, California

University of Illinois Library Urbana, Illinois

Indiana University Library Bloomington, Indiana

State University of Iowa Library Iowa City, Iowa

Director, East Asian Institute Columbia University 433 West 117th Street New York 27, New York

University of San Francisco San Francisco 17, California

Librarian, School of Oriental and African Studies University of London London, W.C. 1, England

Institute for Asian Studies Marquette University Milwaukee 3, Wisconsin

University of Michigan Library Ann Arbor, Michigan

Michigan State University Library East Lansing, Michigan

#### Continued

University of Minnesota Library Minneapolis 14, Minnesota

Ohio State University Libraries 1858 Neil Avenue Columbus 10, Ohio

University of Oregon Library Eugene, Oregon

Pennsylvania Military College Chester, Pennsylvania

University of Pittsburgh Library Pittsburgh 13, Penna.

Princeton University Library Princeton, New Jersey

Purdue University Libraries Lafayette, Indiana

University of Rochester Rochester 20, New York

Institute of Asian Studies St. John's University Graduate School

McKissick Memorial Library University of South Carolina Columbia 1, South Carolina Seton Hall University University College South Orange, New Jersey

University of Southern Calif. Library Los Angeles 7, California

University of Texas Library Austin 12, Texas

Alderman Library University of Virginia Charlottesville, Virginia

Far Eastern Library University of Washington Scattle 5, Washington

Yale University Library New Haven, Connecticut

Asia Library University of Michigan Ann Arbor, Michigan

Research Institute, Sino-Soviet Bloc P.O. Box 3521 Washington 7, D. C.

JPRS: 4485

CSO: 1534-S/b

### PUBLIC HEALTH IN CHINA

[Following is the translation of an article by Dr. Michel Sakka in <u>Cahiers Franco-Chinois</u> (Franco-Chinese Friendship Review) No. 7, Paris, September 1960, pages 70, 72-79].

It is correct to say that the evolution of health conditions has followed the different stages of economic development in China.

The first period from 1949 to 1952 was called the period of the "economic rehabilitation" of China, in which the most urgent matters were undertaken, such as vaccinations and the struggle against epidemics.

From 1952 to 1957, the period of the First Five-Year Plan, the struggle was initiated against the "four plagues" in reaction to the attempts at bacteriological warfare.

In 1956, the Party set up the twelve-year National Program for the Development of Agriculture (1956-1967). A large place was given in this program to questions of public health. Orders were given to intensify the struggle against the four plagues. The battle against parasitic diseases and especially against schistosomiasis was one of the important aims of this program.

Finally, in 1958, the leap forward in Chinese industry and agriculture was also the year of the great leap forward in national health. The socialist slogan was "Bend every effort to construct socialism on the principle of more, quicker, better and cheaper." The way of socialism and the creation of the people's communes greatly assisted the development of hygiene and health throughout the country.

### Rural and Urban Health Care

Great progress has been made in the field of rural and urban health care. For example, from November 1957 to the middle of January 1959:

29 billion 900 million tons of refuse were removed; 1,640,000 kilometers of ditches were cleaned and dredged; 640 square kilometers of marshes were drained and filled; 85,800,000 latrines were built;

3,970,000 wells were dug and properly equipped.

Around the cities, swamp lands favorable to the breeding of flies and mosquitoes were drained and made into parks for workers.

All these public works are in fact the continuation of those begun in 1952 at the time of the patriotic movement against infectious diseases which was started in 1952 to counteract American plans for bacteriological warfare against China and Korea.

To improve public health in the cities, slums and unhealthful

dwellings were razed, refuse removed and sewers rebuilt.

In Peiping, nearly two million dwellings had running water as compared with 600,000 at the time of the liberation. In the rebuilt sewers, 200 kilometers of pipe were laid and 600,000 tons of sewage cleared out. From 1952 to 1957 one million persons were relocated in new housing.

The number of houses built for workers and employees by the state is constantly increasing throughout the country. From 2,510 square kilometers of floor space built in 1950, the figure for 1958 became 26,420 square kilometers. The total floor space built from 1950 to 1958 was 135.580 square kilometers.

This vast program of sanitation improvement in the country as in the city, has played a large part in the struggle against disease and in raising the health level in China. Lasting medical results could be expected only if sustained by an elevated general living standard.

# Infectious Diseases

At the end of 1951, two hundred million citizens had been vaccinated against smallpox. By the end of 1953, this had been done for the whole population, and smallpox had completely disappeared.

By the middle of 1951, the number of cases of plague had fallen 50% from the 1950 figure, and by the end of 1952 the struggle against

plague was successfully completed.

The same is true for cholera. This struggle has been so successful that not a single case has been observed for ten years.

The mortality for measles dropped from 8.6% in 1950 to 1.5% in

1957 and for scarlet fever from 17.5% to 1.3%.

Venereal disease, affecting especially national minorities, has almost entirely disappeared from the country, except in frontier regions.

# Parasitic Diseases

In the fight against schistosomiasis, which used to strike millions of persons in more than twelve provinces, all workers engaged in building large cisterns and all farm workers have been mobilized to coordinate their regular tasks with the destruction of fresh-water snails, intermediate host of the parasite. The prophylactic struggle has thus been combined with mass labor.

In the campaign for eliminating the "oncomelania," up to November 1958 an area of 5,000 square kilometers was cleared and 3,500,000 affected persons treated. Almost 60% of the regions affected were no longer infested with the parasite. In the same way, the provices of Kiangsu and Fukien were cleared, as well as the environs of Shanghai,

which had been hard hit by the disease. By the end of September 1959, 6,350 square kilometers had been freed of the fresh-water snail and more than 4,900,000 patients treated, or 70% of the seven million cases throughout the country. Of these, 3,500,000 were completely cured.

Almost all these cases were treated by a combination of traditional and western medicine. Great progress has been made in the method of

A treatment which formerly lasted 21 days has been shortened to

three days, without danger and with the same results.

The team of therapists formerly consisting of three, of whom one was a doctor and one a nurse, now has only one member, who does the work of three. It is now thought that in from three to five years China will be entirely free of schistosomiasis.

What a considerable accomplishment this will be! I don't think there is another example in medical history of a campaign of medical care

carried out by hundreds of millions of people.

The other parasitic diseases have been combatted with the same energy.

Malaria has also been reduced through mass treatment and prophylaxis,

as well as the fight against mosquitoes.

The number of malaria cases for the first ten months of 1957 dropped about 29% from what it was for the same period the preceding year. It has disappeared in whole cities and districts. For example, in the districts of Se-mo in Yunnan and Lin-ling in Honan province, morbidity had climbed from 70 to 90%. About the beginning of 1958, it had dropped to 0.37% in Se-mo and 0.16% in Lin-ling.

In the administrative region of south Kiangsi (3,700,000 inhabitants) it was announced in November 1958 that malaria had disappeared. Before the liberation, in 18 towns and districts of this region, the mortality rate reached 80% and in a few towns 100%. After six months of an inten-

sive, mass campaign, it fell to 0.87%.

In the autonomous western region of Yunnan, where in 1950 there were 500,000 malaria cases, the mortality rate fell to 0.25% in October 1958.

The same thing happened in Kweichow province.

Kala azar has been overcome in more than 90% of the affected provinces, especially in the northern Yangtze region, where the mortality rate has diminished to 0.5%.

After a special campaign in Shantung province, where there were more than 250,000 cases, kala azar has virtually disappeared, with the

mortality rate dropping from 350 to six per 100,000.

Filariasis. In the regions where this disease was prevalent, 320,000 patients have been treated in the 14 districts in southern Honan and Shan tung, where the disease has practically disappeared. In November 1958, 700,000 stricken persons in all had been treated, and comparative figures showed that in 1958, 16 times more filariasis had been treated than during the eight preceding years.

Ancylostomiasis has disappeared in 61 districts and towns where it was endemic. From January to November 1958, 25,000,000 persons in China were treated for this parasite.

## Tuberculosis

The problem of tuberculosis, which was one of the most ravaging diseases prior to 1949, well illustrates the methods and results of public health programs, and shows how the problems of health are connected with those of the government of the country and with production.

As I have pointed out above, in the whole of China there were only 12 institutions, fewer than 100 doctors and just over 600 beds to fight against TB, and only people of means could take advantage of them.

Now, in less than ten years, there are 101 antitubercular clinics with 4,306 beds, 61 hospitals exclusively devoted to the antituberculosis struggle with 16,455 beds, and 74 sanataria with 14,715 beds. It must be added that 10% of the beds in other hospitals are reserved for tubercular patients, and in the rest homes for state and factory workers, 5,000 beds are reserved for tubercular patients. There are 2,700 doctors in the antituberculosis institutions.

The antituberculosis campaign has benefited from the other popular movements. The patriotic health campaign has raised the level of health consciousness of the masses, just as the great leap forward brought progress to the antituberculosis campaign. During these campaigns, non-specialized health institutions assisted antituberculosis institutions, doctors treating disease in the traditional manner assisted those trained in the western style, and scientific methods were integrated into the mass movements.

Education, as one of the essential factors in the antituberculosis struggle, was utilized in films, publications, posters, radio broadcasts, the theatre, etc.

Taking advantage of the campaign to eliminate the "plagues" and to apply the principles of hygiene, a movement was launched against the dangers of expectoration.

A protracted and difficult aspect of this strenuous campaign has been to make the masses understand the dangers of tuberculosis and the way to fight it. A number of medical assistants have been recruited and given instruction. They have been an important force in controlling the disease.

Raising the standard of living and improving working conditions over the last ten years have also been an appreciable factor in the progress achieved. Let the reader judge for himself:

Before the liberation, the tuberculosis rate in the large cities was between three and nine percent; a few years after the liberation it was one and a half percent, and in 1953 less than one percent.

In 1949, tuberculosis mortality in Peking was 229.8 per 100,000; in 1958 it fell to 45.9 per 100,000.

Vaccination with anti-TB serum has had excellent results in

preventing tuberculosis, especially in children.

During a period of ten years preceding the liberation, fewer than 10,000 units of anti-TB serum were given in the cities of Shanghai, Tientsin, Peiping, etc.

Up to the end of the last year, the number of persons vaccinated

in Peking, Tientsin and in the northwest had reached 16,158.

Since the liberation, the number of vaccinated persons has grown each year. A very incomplete figure shows 17,148,911 vaccinations for the whole of China up to May 1958.

In Peiping, the number of vaccinations performed in 1958 alone (920,000) equaled the total for the whole country in 1955. The results are evident. In a city such as Chiah-sing, annual statistics on mortality from tubercular meningitis in children showed four deaths in 1952, three in 1953 and none from 1953 to 1958.

The manufacture of medicines, collapsotherapy and thoracic surgery have been established and have brought about still greater advances in

the struggle against the harmful Koch bacillus.

# Health System of the Country

A giant effort has been undertaken to endow China with an adequate medical system, effective in men, installations, equipment and medicines.

Toward the end of 1958, health personnel numbered 2,100,000 among whom were 80,000 western-trained doctors. These 2,100,000 were double the figure for 1952 and the 80,000 doctors 46% more than in 1952.

A great effort has been made to develop medical education.

In ten years, nearly 40,000 young doctors and pharmacists graduated from the Advanced Schools of Medicine and Pharmacy, four times more than during a 20-year period preceding the liberation (1928-1947).

Along with these western-trained doctors, 500,000 doctors are practising traditional Chinese medicine. They assist the western-trained doctors in handling health problems. There are traditional medical services in the hospitals. Attempts are being made to study their methods scientifically. The union and cooperation of the two schools seem to be having favorable effects on treatments.

Installations. The construction and equipment of health institutions are proceeding throughout the country according to government plan. In 1958, the country had more than 5,600 hospitals and sanatoria, with 440,000 beds. This was seven times more beds than in 1947, a record year. The people's rural communes played an important part in this construction during the great leap forward.

Now, each commune has its hospital and each production brigade its

dispensary and maternity ward.

The number of hospitals and sanatoria for the exclusive use of workers and employees of industry and mines has increased 59 times, and the number of beds 50 times over the number for 1949.

At the present time in almost every part of China, each department has at least one hospital, each district one hospital, each rural commune one clinic and each agriculture brigade one medical assistant and one midwife.

The operation of the hospital itself has been improved. Formerly it functioned only during the day, except for emergencies (as in France today). Now it operates continuously with three shifts. There is no more waiting in line for admission. Patients for consultation are seen in turn.

Home care has been instituted all over the country, and non-contagious patients may have such care with regular visits from the nurse and doctor.

As for maternity confinement and infant care, China had more than 84,000 confinement stations at the end of 1957, attended by 679,000 midwives.

There were 113,000 village maternity stations in November 1958. During the year of the great leap forward, several provinces attained their goal of one maternity station in each commune, and some have a midwife in each agriculture brigade. At the same time, hygiene campaigns for newborn babies have been actively undertaken. Tetanus among infants has disappeared in the cities and is well controlled in the countryside. Public health services extend over all China, including the regions of national minorities. In these regions there were 750 hospitals at the end of 1958 with more than 31,900 beds and 25 sanataria with more than 2,300 beds. There were 15,000 health centers, health stations and prophylactic stations, with more than 179,000 doctors and medical assistants.

Important progress has been made in the pharmaceutical field as well. In 1953, 80% of medicines had to be imported, while in 1957 only 20% was imported.

Antibiotics are now manufactured in China, as are also expensive products like vitamin B-12, ACTH and insulin.

The evolution of the pharmaceutical industry has naturally paralleled that of public hygiene and medicine. As with public hygiene, it has followed the main productive periods.

Here are a few figures: the production of antibiotics in 1957 was 752 times greater than that of 1952, and of sulfanilamides 12.3 times greater.

During the great leap forward, pharmaceutical demands rose with the growth of health installations and the production of antibiotics. For example, in 1958 it increased 4.4 times over 1957, and in 1959, 10.6 times over 1957.

### Conclusion

These tremendous efforts to instill principles of hygiene in a people extremely backward ten years ago, and who had to be taught to wash their face or brush their teeth, have not hindered scientific

research, wherever it was possible, and the introduction of the most modern techniques of medicine and surgery.

Remarkable results have been achieved in these fields since 1956. That year saw the adoption of "the twelve-year plan for scientific development to overcome China's backwardness also in this field."

Cooperation among the various teams is also necessary. Surgery has made great progress. Open heart operations are now done with the heart-lung apparatus supplying external body circulation. Mutual assistance among schools and research institutes in the country is close and favors even more rapid advancement.

There is no doubt that in this field as in the others, the Chinese have made leaps forward. Space is lacking to indicate the results already achieved. Astonishing cases have been reported of healing from burns over more than the 30% of the skin surface which we consider fatal. With our training, we find such results hard to believe and even Chinese surgeons themselves did not, prior to this accomplishment. In fact, the mass effort proved that the leap forward was possible even in medicine and even in cases classically considered incurable.

All this has been possible, as the Chinese say, thanks to an organization capable of teaching and being united with the masses, thanks to the socialist system, thanks to the people's communes, and thanks to the Chinese Communist Party.